# Design Documentation, Approval, and Process Review

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# 330.01 General

The project file contains the documentation of planning, scoping, programming, design, approvals, contract assembly, utility relocation, needed right of way, advertisement, award, construction, and maintenance review comments for a project. A project file is completed for all projects and is retained by the region office responsible for the project. Responsibility for the project will shift from one office to another during the life of a project. The project file follows the project, as the project responsibility shifts from office to office. Portions of the project file that are not designated as components of the Design Documentation Package may be purged when retention of the construction records is no longer necessary.

The Design Documentation Package is a part of the project file. It documents and justifies design decisions and the design process followed. The Design Documentation Package is retained in a permanent, retrievable file for a period of 75 years, in accordance with WSDOT records retention policy.

For operational changes and developer projects, design documentation is required and is retained by the region office responsible for the project, in accordance with WSDOT records retention policy. All participants in the design process must provide the appropriate documentation for their decisions.

#### 330.02 References

Code of Federal Regulations (CFR) 23 CFR 635.111 "Tied bids"

23 CFR 635.411 "Material or product selection"

Revised Code of Washington (RCW) 47.28.030 Contracts -- State forces -- Monetary limits -- Small businesses, minority, and women contractors -- Rules.

RCW 47.28.035 Cost of project, defined.

Washington Federal-Aid Stewardship Agreement, as implemented in the design matrices (Chapter 325)

Executive Order E 1010.00, "Certification of Documents by Licensed Professionals," WSDOT

Directional Documents Index, D 00-00, WSDOT

Advertisement and Award Manual, M 27-02, WSDOT

Hydraulics Manual, M 23-03, WSDOT

Master Plan for Limited Access Highways, WSDOT

Plans Preparation Manual, M 22-31, WSDOT Route Development Plan, WSDOT

Washington State Highway System Plan, WSDOT

#### 330.03 Definitions

**Design Approval** Documented approval of the Design Documentation Package through signature of a designated representative of the approving organization as shown in Figures 330-2a and 330-2b. This documentation becomes part of the Design Documentation Package. If federal funds are involved, Design Approval is required in order to begin right of way acquisition.

**Design Concurrence** An incremental Design Approval by the designated representative of the approving organization shown in Figures 330-2a and 330-2b. The Project Summary documents must be submitted to the designated approval authority before Design Concurrence can be granted. The primary purpose of Design Concurrence is for work order authorization to establish funding for preliminary engineering.

**DE** A design exception. Preauthorization to omit correction of an existing design element for various types of projects, as designated in the design matrices. See Chapter 325. A DE designation indicates that the design element is normally outside the scope of the Project Type. See Figure 330-1.

design variance A recorded decision to differ from the design level specified in the Design Manual, such as an Evaluate Upgrade (EU) not upgraded, a DE, or a deviation. EUs leading to an upgrade are documented but are not considered to be variances. A project or corridor analysis may also constitute a design variance if that analysis leads to a decision to use a design level or design classification that differs from what the Design Manual specifies for the project type.

**Design Variance Inventory (DVI)** A list of design elements that will not be improved in accordance with the *Design Manual* criteria designated for the project.

Design Variance Inventory System (DVIS)
A database application developed to generate the DVI form. The DVIS also provides query functions providing designers an opportunity to search for previously granted variances. The DVIS application can be accessed at:

http://www.wsdot.wa.gov/eesc/design/projectdev/

**deviation** A documented decision granting approval at project specific locations to differ from the design level specified in the *Design Manual*. See Figure 330-1.

#### environmental documents:

NEPA National Environmental Policy Act SEPA [Washington] State Environmental Policy Act

**CE** NEPA: Categorical Exclusion

CE SEPA: Categorical Exception

EA Environmental Assessment

ECS Environmental Classification Summary

EIS Environmental Impact Statement

ERS Environmental Review Summary

FONSI Finding Of No Significant Impact

ROD Record of Decision

**EU** An evaluate upgrade. A decision making process, requiring evaluation and documentation of whether or not to correct an existing design element as designated in the design matrices. See Figure 330-1.

**FHWA** Federal Highway Administration

**HQ** The Washington State Department of Transportation headquarters organization

**Project Control Form** A form used to document and approve revisions to project scope, schedule, or budget, from a previously approved Project Definition. There are two versions of the Project Control Form. One version of the form is specifically for projects included in the Nickel Funding Package enacted by the 2003 legislature. The other version of the form is for projects that are not included in the Nickel Funding Package. The form is available at:

http://wwwi.wsdot.wa.gov/ppsc/pgmmgt/dpsb/

*project file* A file containing all documentation and data for all activities related to a project. See 330.01 and 330.04.

# Design Documentation Package (DDP)

The portion of the project file, including required project approvals, that will be retained long-term, in accordance with the WSDOT document retention policies. Depending on the scope of the project, it contains the Project Summary and some or all of the other documents discussed in this chapter plus technical reports, calculations (quantity calculations are part of the project file, but are not designated as components of the DDP), estimates, justifications for decisions made, and any applicable documents listed in the Design Documentation Check List on the web.

See 330.04(2). The Design Documentation Package explains how and why the design was chosen, and documents approvals. See 330.01.

**Project Summary** A set of electronic documents consisting of the Environmental Review Summary (ERS), Design Decisions Summary (DDS), and Project Definition (PD). The Project Summary is part of the design documentation required to obtain Design Concurrence and ultimately is part of the design documentation required for Design Approval. See 330.06.

# Environmental Review Summary (ERS)

An electronic document that records the environmental requirements and considerations for a specific project.

#### Design Decisions Summary (DDS)

An electronic document that records major design decisions regarding roadway geometrics, roadway and roadside features, and other issues that influence the project scope and budget.

**Project Definition (PD)** An electronic document that records the purpose and need of the project, along with program level and design constraints.

scoping phase The first phase of project development for a specific project. It follows identification of the need for a project and precedes detailed project design. This is the process of identifying the work to be done and developing a cost estimate for completing the design and construction. The Project Summary, engineering and construction estimates, and several technical reports (such as geotechnical, surfacing, bridge condition, etc.) are developed during this phase.

# 330.04 Design Documentation

# (1) Purpose

Design documentation is prepared to record the evaluations by the various disciplines that result in design recommendations. Design assumptions and decisions made prior to and during the

scoping phase are included. Changes that occur throughout project development are documented. Justifications and approvals, if required, are also included.

The Design Documentation Package identifies the purpose and need of the project and documents how the project addresses the purpose and need. The required content of the Design Documentation Package is identified in the Design Documentation Check List at: http://www.wsdot.wa.gov/eesc/design/projectdev/

# (2) Design Documents

The Design Documentation Package portion of the project file preserves the decision documents generated during the design process. In each package, a summary (list) of the documents is recommended.

The design documents commonly included in the project file and Design Documentation Package for all but the simplest projects are listed in Figure 330-5. For project-specific components, provide documentation in the project file and Design Documentation Package as detailed in the Design Documentation Check List at:

http://www.wsdot.wa.gov/eesc/design/projectdev/

Documentation is not required for components not related to the project.

The Design Variance Inventory is required for all projects on NHS highways having design variances and is recommended for all projects having design variances. This form lists all evaluate upgrades (EU) not upgraded to the applicable design level, design exceptions (DE), and deviations as indicated by the design matrices. Also, record variances resulting from a project or corridor analysis in the DVI. Use the Design Variance Inventory System (DVIS) database application to record and manage design variances. The DVIS is available at:

http://www.wsdot.wa.gov/eesc/design/projectdev/

The Project Definition (PD) and Environmental Review Summary (ERS) are required for most projects. Exceptions will be identified by the Project Control and Reporting office. The Design Decisions Summary (DDS) is not required for the following project types unless they involve reconstructing the lanes, shoulders, or fill slopes. Since these and some other project types are not included in the design matrices, evaluate them with respect to modified design level (M) for non-NHS routes and full design level (F) for NHS routes. Include, in the evaluation, only those design elements specifically impacted by the project. Although the following list illustrates some of the project types that do not require a DDS, the list is not intended to be a complete accounting of all such projects. Consult with the Project Control and Reporting office for projects not included in the list.

- Bridge painting
- · Crushing and stockpiling
- Pit site reclamation
- Lane marker replacement
- · Guide post replacement
- · Signal rephasing
- · Signal upgrade
- · Seismic retrofit
- Bridge joint repair
- Navigation light replacement
- Signing upgrade
- Illumination upgrade
- Rumble strips
- Electrical upgrades
- · Major drainage
- · Bridge scour
- Fish passage
- Other projects as approved by the HQ Design Office

# (3) Certification of Documents by Licensed Professionals

All original technical documents must bear the certification of the responsible licensee. See Executive Order E 1010.00.

# (4) Design Exception, Evaluate Upgrade, and Deviation Documentation

See Figure 330-1 for design matrices documentation requirements.

In special cases, projects may need to address design elements, which are shown as blank cells in a design matrix. These special cases must be coordinated with the appropriate Assistant State Design Engineer, and the HQ Project Control and Reporting office. When this is necessary, document the reasons for inclusion of that work in your project.

When the design matrices specify a DE for a design element, the DE documentation must specify the matrix and row, the design element, and the limits of the exception. When a Design Variance Inventory is required for the project, the DE locations must be recorded in the inventory.

All EU decisions must be documented. The EU process determines if an item of work will or will not be done, through analysis of factors such as benefit/cost, route continuity, accident reduction potential, environmental impact, and economic development. Documentation requirements for an EU decision are similar to, but less demanding than, documentation requirements for a deviation. The cost of the improvement must always be considered when making EU decisions. EU examples on the Internet can serve as models for development of EU documentation. The appropriate approval authority for EUs is designated in Figures 330-2a and 330-2b.

Deviation requests are stand-alone documents requiring enough information and project description for an approving authority to make an informed decision of approval or denial. Documentation of a deviation must contain justification and must be approved at the appropriate administrative level as shown in Figures 330-2a and 330-2b. Submit the request as early as possible because approved deviations are needed prior to Design Approval or Intersection/Interchange Plan approval.

Matrix Cell Content	Project corrects design elements that do not conform to specified design level	Document to file [1]	Record in DVIS [2]
Blank cell in design matrix		No	No
Blank cell in design matrix [3]		DDP	No
Cell Entry			
Full (F), Modified (M), Basic (B)	Yes	No	No
(with no DE or EU qualifiers)	No <sup>[4]</sup>	Yes [5]	Yes
Design Expention (DE)	Yes [3]	DDP	No
Design Exception (DE)	No	DDP	Yes
Evaluate Ungrado (EU) [5]	Yes	DDP	No
Evaluate Upgrade (EU) [5]	No	DDP	Yes

DDP = Document to Design Documentation Package

#### Notes:

- [1] See 330.04(3)
- [2] See 330.04(2)
- [3] May be included in the project in special cases, if identified in the Project Summary or Project Control Form
- [4] Nonconformance with specified design level (Chapter 325) requires an approved deviation
- [5] Requires supporting justification (See 330-04(4).)

# Design Matrix Documentation Requirements Figure 330-1

When applying for deviation approval, it is necessary to provide two explanations. The first identifies the design element and explains why the design level specified in the design matrices was not or cannot be used. The second provides the justification for the design that is proposed. Justification for a deviation must be supported by at least two of the following:

- Accident history and accident analysis
- Benefit/cost analysis
- Engineering judgment
- Environmental issues
- Route continuity

An element of engineering judgment might be a reference to another publication, with an explanation of why that reference is applicable to the situation encountered on the project. If the element you wish to deviate from, meets the AASHTO *Policy on Geometric Design of Highways and Streets, but not the Design Manual* criteria, the only documentation and justification required to support the deviation request is to;

- Identify the design element
- Explain why the design level specified in the design matrices was not used
- Explain which reference to the AASHTO
   Policy on Geometric Design of Highways and
   Streets was used (including the publication
   date, chapter, and page number of the policy)

Approval is at the appropriate administrative level, as shown in Figures 330-2a and 330-2b.

Reference a corridor or project analysis as supporting justification for design deviations dealing with route continuity issues. See Chapter 325.

Once a deviation is approved, it applies to that project only. When a new project is programmed at the same location, the subject design element must be reevaluated and either (1) the subject design element is rebuilt to conform with the applicable design level, or (2) a new deviation is developed, approved, and preserved in the Design Documentation Package for the new project. Check the Design Variance Inventory System for help in identifying previously granted deviations.

A change in a design level resulting from an approved Route Development Plan or corridor or project analysis, as specified in design matrix notes, is documented similar to an EU. Design elements that do not comply with the design level specified in an approved corridor or project analysis are documented as deviations.

To prepare a deviation request, or to document an EU decision, use the list in Figure 330-6 as a general guide for the sequence of the content. The list is not all-inclusive of potential content and it might include suggested topics that do not apply to a particular project. Design deviation examples are on the Internet at: http://www.wsdot.wa.gov/eesc/design/projectdev/

# 330.05 Project Development

In general, the region initiates the development of a specific project by preparing the Project Summary. Some project types may be initiated by other WSDOT groups such as the Bridge Office or the Traffic Office, rather than the region. The project coordination with other disciplines (such as Real Estate Services, Utilities, and Environmental) is started in the project scoping phase and continues throughout the project's development. The region coordinates with state and federal resource agencies and local governments to provide and obtain information to assist in developing the project.

The project is developed in accordance with all applicable Directives, Instructional Letters, Supplements, and manuals as listed in D 00-00; the Master Plan for Limited Access Highways; Washington State Highway System Plan; Route Development Plan; Washington Federal-Aid Stewardship Agreement as implemented in the design matrices (Chapter 325); and the Project Summary.

The region develops and maintains documentation for each project. The project file includes documentation of project work including planning, scoping, public involvement, environmental action, design decisions, right of way acquisition, PS&E development, project advertisement, and construction. Refer to the *Plans Preparation Manual* for PS&E documentation.

All projects involving FHWA action require NEPA clearance. Environmental action is determined through the Environmental Classification Summary (ECS) form. The environmental approval levels are shown in Figures 330-3a and 3b.

Upon receipt of the ECS approval, for projects requiring an EA or EIS under NEPA, the region proceeds with environmental documentation, including instituting public involvement methods that are appropriate to the magnitude and type of the project. (See Chapter 210.)

The Assistant State Design Engineers work with the regions on project development and conduct process reviews on projects as described in 330.09.

# 330.06 Scoping Phase

Development of the project scope is the initial phase of project development for a specific project. This effort is prompted by the *Washington State Highway System Plan*. The project scoping phase consists of determining a project description, schedule, and cost estimate. The intent is to make design decisions early in the project development process that focus the scope of the project. During the project scoping phase, the Project Summary documents are produced.

Project Summary provides information on the results of the scoping phase; links the project to the Washington State Highway System Plan and the Capital Improvement and Preservation Program (CIPP); and documents the design decisions, the environmental classification, and agency coordination. The Project Summary is developed and Design Concurrence is granted before the project is funded for design and construction. The Project Summary consists of ERS, DDS, and PD documents, which are

electronic forms. Specific on-line instructions for filling them out are contained in the Project Summary database.

Environmental Review Summary (ERS) lists the environmental permits and approvals that will be required, environmental classifications, and environmental considerations. This form lists requirements by environmental and permitting agencies. If there is a change in the Project Summary, the information in the ERS must be reviewed and revised to match the new Project Summary. The ERS is prepared during the scoping phase and is approved by the region.

Design Decisions Summary (DDS) states the design matrix used to develop the project, the roadway geometrics, design deviations, evaluate upgrades (EUs), other roadway features, and any design decisions made during scoping of a project. The information contained in this form is compiled from various databases of departmental information, field data collection, and evaluations made in development of the Project Definition and the ERS. Design decisions may be revised throughout the project development process based on continuing evaluations.

The DDS is approved by the appropriate Assistant State Design Engineer for new construction and reconstruction projects on the Interstate System before submittal to FHWA. See 330.07. The regional design authority approves the DDS for all other types of projects. To approve the Design Decisions Summary, the region must be comfortable that there will be no significant change in the Project Definition or estimated cost. If, however, there is a change to the PD or a significant change in the cost estimate, the DDS is to be revised or supplemented and reapproved. Significant cost changes require a Project Control Form to be submitted and approved by the appropriate designee.

**Project Definition (PD)** identifies the various disciplines and design elements that will be encountered in project development. The PD states the needs, the purpose of the project, program categories, and the recommendations for project phasing. This information determines the level of documentation and evaluation that is needed for Design Approval.

The PD is completed early in the scoping phase to provide a basis for full development of the ERS, DDS, schedule, and estimate. If circumstances necessitate a change to an approved PD, process a Project Control Form for approval by the appropriate designee, revise the original PD form, and obtain approval of the revisions.

# 330.07 FHWA Approval

For all NHS projects, the level of FHWA oversight varies according to the type of project, the agency doing the work, and the funding source as shown in Figures 330-2a and 330-2b. Oversight and funding do not affect the level of design documentation required for a project.

An FHWA determination of engineering and operational acceptance is required for any new or revised access point (including interchanges, temporary access breaks, and locked gate access points) on the Interstate System, regardless of funding. (See Chapter 1425.)

Documents for projects requiring FHWA review and Design Approval are submitted through the Headquarters (HQ) Design Office. Include applicable project documents as specified in Figure 330-5.

# 330.08 Design Approval

When the Project Summary documents are complete, and the region is confident that the proposed design adequately addresses the purpose and need for the project, a Design Concurrence may be entered into the Project File. (See Design Concurrence definition for purpose.)

When the Design Documentation Package is complete, Design Approval is granted by the approval authority designated in Figures 330-2a and 330-2b. The Design Approval becomes part of the DDP. See 330.04 and Figure 330-5 for design documents that may lead to Design Approval. Figures 330-2a through 330-4 present approval levels for project design and PS&E documents.

The following items must be approved prior to Design Approval:

- Required Environmental Documents
- · Project Summary Documents
- Design Variance Inventory as required
- Cost Estimate

At the time of Design Approval, the Design Documentation Package addresses all guidance currently implemented in the Design Manual. If a project is delayed but is advertised within three years of the Design Approval, discuss Design Manual revisions with your Project Development Engineer, who will discuss the revisions with the appropriate Assistant State Design Engineer (ASDE) to determine if there is a need to redesign any portion of the project. If the ASDE determines that a redesign is not necessary, the ASDE will confirm with an e-mail. Place a copy of the e-mail confirmation in the Design Documentation Package to document that the current design criteria was evaluated and the ASDE agreed that a redesign is unnecessary.

Address new design policy for projects to be advertised more than three years after Design Approval, redesign as appropriate, and update the Design Documentation Package and the Design Approval to reflect the revisions. For an overview of design policy changes, consult the Detailed Chronology of Design Policy Changes Affecting Shelved Projects at:

http://www.wsdot.wa.gov/eesc/design/policy/designpolicy.htm

## 330.09 Process Review

The process review is done to provide reasonable assurance that projects are prepared in compliance with established policies and procedures and that adequate records exist to show compliance with state and federal requirements. Process reviews are conducted by WSDOT, FHWA, or a combination of both.

The design and PS&E process review is performed in each region at least once each year by the HQ Project Development Branch. The documents used in the review process are: the Design Documentation Check List, PS&E Review Check List, and PS&E Review Summary.

These are generic forms used for all project reviews. Copies of these working documents are available for reference when assembling project documentation.

HQ Design Office, Project Development Branch maintains current copies on the Internet at: http://www.wsdot.wa.gov/eesc/design/projectdev/

Each project selected for review is examined completely and systematically beginning with the scoping phase (including planning documents) and continuing through contract plans and (when available) construction records and change orders. Projects are normally selected after contract award. For projects having major traffic design elements, the Maintenance and Operations Programs' Traffic Operations personnel are involved in the review. The WSDOT process reviews may be held in conjunction with FHWA process reviews.

The HQ Project Development Branch schedules the process review and coordinates it with the region and FHWA.

A process review follows this general agenda:

- 1. Review team meets with regional personnel to discuss the object of the review.
- 2. Review team reviews the design and PS&E documents, and the construction documents and change orders if available, using the check lists.
- 3. Review team meets with regional personnel to ask questions and clarify issues of concern.
- 4. Review team meets with regional personnel to discuss findings.
- 5. Review team submits a draft report to the region for comments and input.
- 6. If the review of a project shows a serious discrepancy, the regional design authority is asked to report the steps that will be taken to correct the deficiency.
- 7. The process review summary forms are completed.
- 8. The summary forms and check lists are evaluated by the State Design Engineer.
- The findings and recommendations of the State Design Engineer are forwarded to the regional design authority, for action and/or information, within 30 days of the review.

Project Design	FHWA Oversight Level	Deviation and Corridor/Project Approval(a)(b)	EU Approval(b)	Design Approval
Interstate				
New/Reconstruction <sup>(c)</sup> Federal funds     No federal funds	(d) (e)	FHWA	Region	FHWA
Intelligent Transportation Systems (ITS) over \$1 million	(f)	HQ Design	Region	HQ Design
All Other <sup>(g)</sup> • Federal funds  • State funds  • Local agency funds	(f) (f) (e)	HQ Design	Region	Region
National Highway System (NHS)				
Managed access highway outside incorporated cities and towns, or inside unincorporated cities and towns, or on a limited access highway	(f)	HQ Design	Region	Region
Managed access highway within incorporated cities and towns <sup>(h)</sup> Inside curb or EPS <sup>(i)</sup> Outside curb or EPS	(f) (f)	HQ Design HQ H&LP	Region N/A	Region City/Town

FHWA = Federal Highway Administration

HQ = WSDOT Headquarters

H&LP = WSDOT Highways and Local Programs Office

EPS = Edge of paved shoulder where curbs do not exist

- (a) These approval levels also apply to deviation processing for local agency work on a state highway.
- (b) See 330.04(4).
- (c) See Chapter 325 for definition.
- (d) Requires FHWA review and approval (full oversight) of design and PS&E submitted by HQ Design.
- (e) To determine the appropriate oversight level, FHWA reviews the Project Summary (or other programming document) submitted by HQ Design, or by WSDOT Highways and Local Programs through HQ Design.
- (f) FHWA oversight is accomplished by process review. (See 330.09)
- (g) Reduction of through lane or shoulder widths (regardless of funding) requires FHWA review and approval of the proposal.
- (h) Applies to the area within the incorporated limits of cities and towns.
- (i) Includes raised medians.

Design Approval Level Figure 330-2a

Project Design	FHWA Oversight Level	Deviation and Corridor/Project Approval <sup>(a)(b)</sup>	EU Approval <sup>(b)</sup>	Design Approval
Non-National Highway System (Non-NHS)				
Improvement project on managed access highway outside incorporated cities and towns, or within unincorporated cities and towns, or on a limited access highway, (Matrix lines 5-8 through 5-26)	N/A	HQ Design	Region	Region
Improvement project on managed access highway within incorporated cities and towns(h)  Inside curb or EPS <sup>(i)</sup> Outside curb or EPS (Matrix lines 5-8 through 5-26)	N/A N/A	HQ Design HQ H&LP	Region N/A	Region City/Town
Preservation project on managed access highway outside incorporated cities and towns, or within unincorporated cities and towns, or on a limited access highway <sup>(j)</sup> (Matrix lines 5-1 through 5-7)	N/A	Region <sup>(k)</sup>	Region	Region
Preservation project on managed access highway within incorporated cities and towns <sup>(h)(j)</sup> • Inside curb or EPS <sup>(i)</sup> • Outside curb or EPS (Matrix lines 5-1 through 5-7)	N/A N/A	Region HQ H&LP	Region N/A	Region City/Town

FHWA = Federal Highway Administration

HQ = WSDOT Headquarters

H&LP = WSDOT Highways and Local Programs Office

EPS = Edge of paved shoulder where curbs do not exist

- (a) These approval levels also apply to deviation processing for local agency work on a state highway.
- (b) See 330.04(4).
- (h) Applies to the area within the incorporated limits of cities and towns.
- (i) Includes raised medians.
- (j) For Bridge Replacement projects in the preservation program, follow the approval level specified for improvement projects.
- (k) See Chapters 1430 and 1435 for guidance on access deviations.

Design Approval Level Figure 330-2b

lée un	Approval Authority		
Item	Region	HQ	FHWA
Program Development			
Work Order Authorization		Х	X [1]
Public Hearings			
Corridor Hearing Summary		X [2]	
Design Summary		X [3]	
Access Hearing Plan		X [4]	
Access Findings and Order		X [5]	
Environmental By Classification			
Summary (ECS) NEPA			Х
Class I NEPA (EIS)		[7]	Х
Class I SEPA (EIS)		Х	
Class II NEPA *Programmatical Categorical Exclusion (CE)	Х		
Class II NEPA — Documented Categorical Exclusion (CE)	[6]		Х
Class II SEPA — Categorical Exemption (CE)	Х		
Class III NEPA — Environmental Assessment (EA)		[7]	Х
SEPA Check List	Х		
Design			
Design Deviations	[8]	[8]	[8]
Experimental Features		Х	<b>X</b> [9]
Environmental Review Summary	Х		
Final Design Decisions Summary	Х	<b>X</b> [3]	
Final Project Definition		<b>X</b> <sup>[10]</sup>	
Access Point Decision Report		[7]	Х
Non-Interstate Interchange Access Point Report		Х	
Interchange Plans	<b>X</b> <sup>[11]</sup>	<b>X</b> <sup>[9][11]</sup>	
Intersection Plans	<b>X</b> [11]	<b>X</b> <sup>[9][11]</sup>	
Right of Way Plans	[12]	Х	
Monumentation Map	Х		
Materials Source Report		<b>X</b> <sup>[13]</sup>	
Pavement Determination Report		<b>X</b> <sup>[13]</sup>	
Project Design Approval	[8]	[8]	[8]

Approvals
Figure 330-3a

Mana.	Approval Authority		
Item	Region	HQ	FHWA
Design			
Resurfacing Report		<b>X</b> <sup>[13]</sup>	
Signal Permits	<b>X</b> <sup>[14]</sup>		
Geotechnical Report		<b>X</b> <sup>[13]</sup>	
Tied Bids	<b>X</b> <sup>[15]</sup>		<b>X</b> <sup>[9][15]</sup>
Bridge Design Plans (Bridge Layout)	X	Х	
Hydraulic Report	<b>X</b> <sup>[16]</sup>	<b>X</b> [16][17]	
Preliminary Signalization Plans		<b>X</b> <sup>[6]</sup>	
Rest Area Plans		Х	
Roadside Restoration Plans	<b>X</b> <sup>[18]</sup>	<b>X</b> <sup>[19]</sup>	
Structures Requiring TS&L's		Х	Х
Wetland Mitigation Plans	X	Х	
Wetland Mitigation Planting Plans	<b>X</b> <sup>[18]</sup>	<b>X</b> <sup>[19]</sup>	
Grading Plans	<b>X</b> <sup>[18]</sup>	<b>X</b> <sup>[19]</sup>	
Continuous Illumination – Main Line		<b>X</b> <sup>[20]</sup>	
Project Control Form	<b>X</b> <sup>[21]</sup>	<b>X</b> <sup>[21]</sup>	

# X Normal procedure

\* If on the preapproved list

#### Notes:

- [1] Federal aid projects only.
- [2] Environmental and Engineering Programs Director approval.
- [3] State Design Engineer approval.
- [4] Right of Way Plans Engineer approval.
- [5] Refer to Chapter 210 for approval requirements.
- [6] Final review & concurrence required at the region prior to submittal to approving authority.
- [7] Final review & concurrence required at HQ prior to submittal to approving authority.
- [8] Refer to Figures 330-2a & 330-2b for design approval level.
- [9] Applies to new/reconstruction projects on Interstate routes.
- [10] HQ Project Control & Reporting approval.
- [11] Include channelization details.
- [12] Certified by the responsible professional licensee.
- [13] Submit to HQ Mateirals Branch for review and approval.
- [14] Approved by region's Administrator.
- [15] See 23 CFR 635.111.
- [16] See M 23-03, Hydraulics Manual for additional guidance.
- [17] Region to submit Hydraulic Report. Refer to Hydraulics Manual.
- [18] Applies only to regions with a Landscape Architect.
- [19] Applies only to regions without a Landscape Architect.
- [20] Approved by State Traffic Engineer.
- [21] Consult HQ Project Control & Reporting for clarification on approval authority.

Approvals
Figure 330-3b

Item	New/ Reconstruction (Interstate only)	NHS and Non-NHS
DBE/training goals* **	(a)	(a)
Right of way certification for federal aid projects	FHWA (b)	FHWA (b)
Right of way certification for state funded projects	Region <sup>(b)</sup>	Region <sup>(b)</sup>
Railroad agreements	(c)	(c)
Work performed for public or private entities*	[1][2]	Region <sup>[1][2]</sup>
State force work*	FHWA <sup>[3](d)</sup>	[3](c)(d)
Use of state furnished stockpiled materials*	FHWA <sup>[4]</sup>	Region <sup>[4]</sup>
Stockpiling materials for future projects*	FHWA <sup>[4]</sup>	Region <sup>[4]</sup>
Work order authorization	[5](d)	[5](d)
Ultimate reclamation plan approval through DNR	Region	Region
Proprietary item use*	FHWA <sup>[4]</sup>	[4](c)
Mandatory material sources and/or waste sites*	FHWA <sup>[4]</sup>	Region <sup>[4]</sup>
Nonstandard bid item use*	Region	Region
Incentive provisions	FHWA	(e)
Nonstandard time for completion liquidated damages*	FHWA <sup>(e)</sup>	(e)
Interim liquidated damages*	(f)	(f)

#### Notes:

- [1] This work requires a written agreement.
- [2] Region approval subject to \$250,000 limitation.
- [3] Use of state forces is subject to \$50,000 limitation as stipulated in RCWs 47.28.030 and 47.28.035.
- [4] Applies only to federal aid projects. However, document for all projects.
- [5] Prior FHWA funding approval required for federal aid projects.

## Regional or Headquarters approval authority:

- (a) Office of Equal Opportunity
- (b) Real Estate Services
- (c) Design Office
- (d) Project Control & Reporting Office
- (e) Construction Office
- (f) Transportation Data Office

#### References:

- \*\*Advertisement and Award Manual
- \*Plans Preparation Manual

PS&E Process Approvals
Figure 330-4

Document [1]	Required for FHWA Oversight
Project Definition	Х
Design Decisions Summary	Х
Environmental Review Summary	Х
Design Variance Inventory (and supporting information for DEs, EUs not upgraded, and deviations) [2]	Х
Cost Estimate	Х
SEPA & NEPA documentation	Х
Design Clear Zone Inventory (see Chapter 700)	Х
Interchange plans, profiles, roadway sections	Х
Access Point Decision Report (if requesting new or revised access points)	X
Corridor or Project analysis (see Chapter 325)	Х
Traffic projections and analysis	
Accident analysis	
Right of Way plans	
Work zone traffic control strategy	
Record of Survey or Monumentation Map	
Documentation of decisions to differ from WSDOT design guidance	
Documentation of decisions for project components for which there is no WSDOT design guidance	
Paths and Trails Calculations [3]	

## Notes:

- [1] See Design Documentation Check List at http://www.wsdot.wa.gov/eesc/design/projectdev/ for a complete list of project documentation requirements.
- [2] Required for NHS highways, recommended for all highways.
- [3] See Plans Preparation Manual.

Common Components of Design Documentation Package Figure 330-5

- 1. Overview
  - (a) The safety or improvement need that the project is to meet
  - (b) Description of the project as a whole
  - (c) Highway classification and applicable design matrix
  - (d) Funding sources
  - (e) Evidence of deviations approved for previous projects (same location)
- 2. Design Alternatives in Question
  - (a) Existing Conditions and Design Data
    - Location in guestion
    - · Rural, urban, or developing
    - Route development plan
    - · Environmental issues
    - · Right of way issues
    - · Number of lanes and existing geometrics
    - · Present and 20 year projected ADT
    - · Design speed, posted speed and operating speed
    - · Percentage of trucks
    - · Terrain designation
    - · Managed Access or Limited Access
  - (b) Accident Summary and Analysis
  - (c) Design Using the Design Manual criteria
    - Description
    - · Cost estimate
    - · B/C ratio
    - · Advantages and disadvantages
    - · Reasons for considering other designs
  - (d) Other Alternatives (may include "No-build" alternative)
    - Description
    - · Cost estimate
    - · B/C ratio
    - · Advantages and disadvantages
    - · Reasons for rejection
  - (e) Selected design requiring justification or documentation to file
    - Description
    - · Cost estimate
    - B/C ratio
    - · Advantages and disadvantages
- 3. Concurrences, Approvals, and Professional Seals

Deviation and Evaluate Upgrade Request/Documentation Content List Figure 330-6